D0 Status Report

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FNAL

All Experimenters' Meeting
19 September 2011

Data Taking

	Delivered Lum (pb^{-1})	Recorded Lum (pb^{-1})	Efficiency (%)	Comment
12 Sep	5.45	5.04	93	Energy scans begin.
13 Sep	0.00	0.00	97	Opportunistic access to recover a PDT section and some calorimeter channels.
14 Sep	0.01	0.01	91	
15 Sep	0.02	0.02 (0.02)	90 (79)	Requested access to replace a bad calorimeter rack monitor. In the process damaged a monitoring cable.
16 Sep	5.69	5.28	93	Energy scans end. Opportunistic access to replace the bad cable.
17 Sep	7.45	5.35 (2.78)	72 (37)	Lose 1/6th of the silicon due to a failed power supply. Requested long access to recover.
18 Sep	8.10	7.50	93	Start of the store delayed 10 minutes due to high halo rates.
12-18 Sep	**26.7**	**23.2 (20.6)**	**87 (77)**	(Data recorded with full detector)

Energy Scan at 900 GeV

Store	Duration (hr)	Initial Lum (E30)*	Delivered Lum (nb^{-1})*	Min Bias Events (k)
9104	2.11	0.64	1.23	176
9106	4.58	1.10	11.48	1628
9112	8.66	1.20	15.08	2158
9114	0.98	0.95	2.47	272
9120	7.37	0.99	14.16	1908
9122	5.96	1.00	12.26	1708
Totals	**29.7**		**56.7**	**7850**

*Preliminary luminosity based on 1960 GeV luminosity constant.

Silicon Power Supply Problems

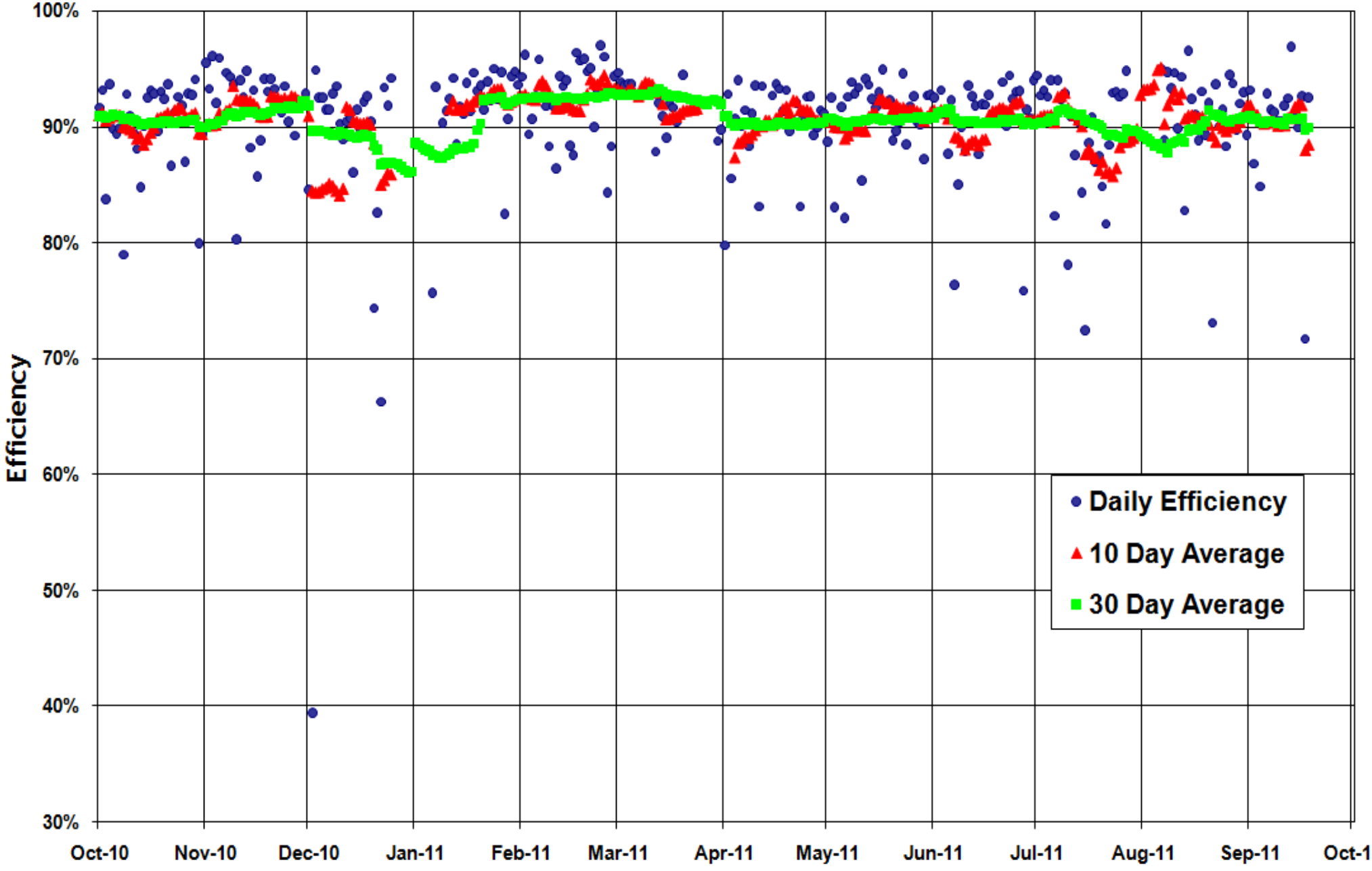
- Early in store 9126, we had a silicon sequencer power supply and an interface board (IB) power supply trip.
  - At first, the attempts to recover these supplies were not successful.
    - (A later attempt to recover the IB power supply was successful, but was not interpreted correctly.)
  - The "bad" IB power supply meant that D0 needed a long access to open to the cathedral to change the supply.
    - D0 appreciates the prompt access granted by the AD.
  - Experts and electrical and mechanical crews were called in to address the problem.

Silicon Power Supply Problems II

- Once the experts arrived at D0, the interface board power supply was found to have been recovered.
  - The primary sequencer power supply had a failed module and the secondary power supply failed to deliver voltage.
    - A portion of the rack monitoring system also failed while working on the system.
- We did not have to open the detector, so a potential eight hour access was limited to four.
  - D0 would like to thank the mechanical and electrical crews for their willingness to sacrifice some of their weekend.

Daily Data Taking Efficiency

1 October 2010 - 18 September 2011



Run II Integrated Luminosity

19 April 2002 -18 September 2011